

## **REMARKS/ARGUMENTS**

The rejections presented in the Office Action dated February 24, 2006 (hereinafter Office Action) have been considered. Claims 1-29 are pending in the application. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

The Office Action dated February 24, 2006, indicated that Claims 1, 4-8, 10-11 and 15-25 stand rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,321,071 to Pekkarinen *et al.* (hereinafter “Pekkarinen”); Claims 2, 3, 9, 12 and 26 stand rejected under 35 U.S.C. §103(a) over Pekkarinen *et al.*; and Claims 13, 14, 27 and 28 stand rejected under 35 U.S.C. §103(a) over Pekkarinen in view of U.S. Publication No. 2004/0203467 by Liu *et al.* (hereinafter “Liu”).

The Applicants have amended the Specification to correct typographical errors. These changes do not introduce new matter to the disclosure.

The Applicants respectfully traverse each of the prior art rejections (§§102(b) and 103(a)) because the cited Pekkarinen patent does not teach or suggest each of the claimed limitations. More specifically, Pekkarinen does not teach down-converting an RF output test signal to a base band (BB) frequency, thus generating a BB output test signal, as claimed. Pekkarinen teaches that the frequency of the down-converted diagnostic signal 24 is the difference frequency  $f_y$  used to generate the down-converting signal  $f_{LO}$  for the down-conversion circuit 22 (column 5, lines 21-24). The frequency  $f_y$  may lie in the range of 100 KHz to 1.25 MHz in a W-CDMA system (column 5, lines 9-11). However, the instant Specification defines the BB frequency as being in a frequency region below 100kHz (*see, e.g.,* paragraph 0060). The frequency of Pekkarinen’s down-converted diagnostic signal 24 is higher than the claimed BB frequency and therefore does not correspond to the claimed BB output signal. The citations to Liu fail to overcome this deficiency. Without a presentation of correspondence to each of the claimed limitations, the prior art rejections are improper. The Applicants accordingly request that they be withdrawn.

Without acquiescing to the above-discussed prior art rejections, the Applicants have amended Claims 2 and 16 to be in independent form and include limitations directed to accessing an RF circuit using a standardized boundary scan test structure. Claims 3-6, 8-11, 13,

14, 17-20, 22, 25, 27, and 28 have been amended merely to provide proper dependency in view of the cancellation of Claims 1 and 15. These changes do not introduce new matter, and each of the claims is believed to be allowable over the cited references for the further reasons discussed below.

The Examiner acknowledges at page 5 that Pekkarinen does not teach accessing the RF circuit with a standardized boundary scan test structure, and the assertion that a standardized boundary scan test structure is well known is misplaced. Paragraph 0034 of the instant Specification merely provides examples of boundary scan test structures. The reference to example boundary scan test structures is in no way an admission that such example test structures would be used to access an RF circuit in order to probe an RF output test signal. The conclusion that a skilled artisan would use a standardized boundary scan test structure to control input and output signals as taught by Pekkarinen is illogical and based upon hindsight.

The assertion that a skilled artisan would use standardized boundary scan test structures in combination with the teachings of Pekkarinen is illogical as Pekkarinen is directed to radio frequencies. A common frequency range of standardized boundary test structures, such as those compliant with the IEEE 1149.X is in the order of 10 kHz - far below the radio frequency region. The radio frequency region covers a frequency range from hundreds of kHz to several GHz. *See, e.g.*, Specification paragraph 0061. Therefore, a skilled artisan would not be motivated to apply standardized boundary test structures for testing an RF circuit such as one in a wireless device of a telecommunications system.

The Examiner must show some objective teaching leading to the combination. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). It is respectfully submitted that there is no such objective teaching in Pekkarinen that leads to the proposed modification, and it is respectfully submitted that aspects purportedly found in the prior art have been pieced together to arrive at the invention through hindsight. As stated by the Federal Circuit:

Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight.

*In re Dembiczak*, 50 USPQ2d 1614, (Fed. Cir. 1999) (citing *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985)). Without a suggestion of the

desirability of “the combination,” a combination or modification of such references is made in hindsight, and the “range of sources available, however, does not diminish the requirement for actual evidence.” *Id.* It is a requirement that actual evidence of a suggestion, teaching or motivation to combine or modify prior art references be shown, and that this evidence be “clear and particular.” *Id.* Broad conclusory statements regarding the teaching of references, standing alone, are not evidence. *Id.*

Each of the independent claims is directed to a combination of accessing an RF circuit and down-converting an RF output test signal to a BB frequency by using a standardized boundary scan test structure integrated at least partially into the RF circuit. For the reasons discussed above, the Applicants submit that the cited references do not teach or suggest, alone or in combination, the claimed invention, and the requisite evidence of motivation has not been presented. The Applicants accordingly request that each of the rejections be withdrawn.

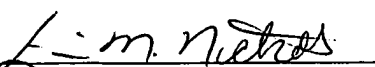
The Applicants have also added new Claim 29 to further characterize the invention. As new Claim 29 includes the limitations discussed above in connection with independent Claims 2 and 16, Claim 29 is also believed to be patentable over the cited references for similar reasons. Moreover, Claim 29 does not introduce new matter to the application.

Authorization is given to charge Deposit Account No. 50-3581 (KOLS.059PA) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the undersigned attorney of record invites the Examiner to contact her at the number below to discuss any issues related to this case.

Respectfully submitted,

HOLLINGSWORTH & FUNK, LLC  
8009 34<sup>th</sup> Avenue South, Suite 125  
Minneapolis, MN 55425  
952.854.2700

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By: 

Erin M. Nichols  
Reg. No. 57,125